TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL NASA/GODDARD SPACE FLIGHT CENTER REQUEST FOR TASK PLAN / TASK ORDER CONTRACTOR CONTRACT NO. TASK NO. JOB ORDER NUMBER NAS5-TASK NO. **AMENDMENT** QSS Group, Inc. 99124 563-225-11-15-89 00 TASK TITLE: (NTE 80 characters; include Project name) 50 Ah NiH2 Terra Cell Anomaly Investigation APPROVALS: (Type or print name and sign) ASSISTANT TECHNICAL REPRESENTATIVE (OR TASKIMONITOR) Gopal Rao 563 563 301-286-6654 PHONE Marlon Enciso 563 301-286-5845 CONTRACTING OFFICER'S TECHNICAL F PRobert S. Lebair. Jr 560 301-286-6588 FLIGHT HARDWARE, CRITICAL GSE OR SOFTWARE? CONTRACTING OFFICER'S QUALITY REP DESIGNATED FAM: [X] NO [] YES The contractor shall identify and explain the reason for any deviations, exceptions. (To be completed by Contracting Officer) or conditional assumptions taken with respect to this Task Order or to any of the C.O. Requested Quote on: technical requirements of the Task Order Statement of Work and related specifications. DEC - 6 1999 The contractor shall complete and submit the required Reps and Certs. Contractor will develop specification or statement of work under this task for a future procurement. Flight hardware will be shipped to GSFC for testing prior to final delivery. [] NO I 1 YES Government Furnished Property/Facilities: [] NO [X] YES -- SEE LIST OF GFP (offsite only) / FACILITIES (onsite only) Onsite Performance: [X] NO [] PARTIAL [] YES If yes: [] TOTAL If partial, indicate onsite work in SOW by asterisk (*) Surveillance Plan Attached: [] YES [X] NO Highlighted Contract Clauses: (to be completed by Contracting Officer) The effective date of this task order is December 17, 1999. INCENTIVE FEE STRUCTURE (check one) (See Contract NAS5-99124, Attachment K, Incentive Fee Plan) No. 2 X No. 1 No. 3 No. 4 No. 5 Cost 10% 50% 25% 25% % Schedule 15% 25% 25% 50% % 50% Technical 75% 25% 25% (To be completed by Contracting Officer) The target cost of this task order is \$ 20,732 The target fee of this task order is \$____160 The total target cost and target fee of this task order as contemplated by the Incentive Fee clause of this contract is \$ 20,892 The maximum fee is \$ 234 The minimum fee is \$0. AUTHORIZED SIGNATURE: THIS TASK ASSIGNMENT IS ISSUED ACCORDING TO THE CONTRACT CLAUSE TASK ASSIGNMENTS AND REPORTS Lorrie L. Eakin Contracting Officer TYPED NAME OF CONTRACTING OFFICER IGNATURE OF CONTRACTING OFFICER CONTRACTOR'S ACCEPTANCE DATE **AUTHORIZED SIGNATURE**

TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL

NASA/GODDARD SPACE FLIGHT CENTER

REQUEST FOR TASK PLAN / TASK ORDER

CONTRACTOR	CONTRACT NO TASI	KNO	1484, 65 220	
	NAS5-	TASK NO.	AMENDMENT	
QSS Group, Inc.	99124	175		

Applicable paragraphs from contract Statement of Work:

Function 2.D.7

STATEMENT OF WORK: (Continue on blank paper if additional space is required)

The contractor shall provide facility, support and services to perform the investigation on the cause of second plateau in 50 Ah NiH2 Terra Spacecraft flight batteries' cells.

GSFC shall provide a total of six cells for this study; three (3) cells from workhorse battery pack, one (1) from GSFC Battery Lab testing cells, one (1) cell from Lot 2 in cold storage at COMSAT and one (1) cell from EOS-AM-1 Stress Pack at COMSAT.

The contractor shall perform following tests:

Perform Electrical Characterization,

Perform Oxygen Chemisorption study on one (1) cell,

Perform 500 Stress cycles on one(1) cell,

Perform Gas Analysis prior to the Cell Teardown,

Analyze Positive Plate Utilization and Positive Precharge, and

Analyze Electrolyte Concentration.

The contractor shall notify the ATR of any cell failure within 48 hours of such a failure.

The contractor shall prepare a corrective action plan after such a failure, and submit it to the ATR within 72 hours of the failure.

The contractor shall fax (301-286-1751) a typical orbit data weekly to the ATR only for Stress Test.

The contractor shall inform the ATR in advance (three days prior to cell tear down) by phone at (301)286-6654 and email to the address gopalakrishn.m.rao@gsfc.nasa.gov

Upon completion of the study, the contractor shall submit a final report to the ATR within 21 days.

PERFORMANCE SPECIFICATIONS:

All plans and testing under this task are to be produced and performed using aerospace cell testing standard.

APPLICABLE DOCUMENTS:

Terra Cell Anomaly Study Test Plan by Gopal Rao, Code 563, GSFC dated November 22, 1999 (copy attached).

TASK END DATE: **22X29/XXX** 3/31/00

MILESTONES/DELIVERABLES AND DATES:

A typical orbit data only for Stress test

Status Report

Cell Failure Notification Corrective Action Plan

Final Report

Weekly Bi-weekly

Within 48 hours of such a failure Within 72 hours of the failure

Within 21 days of the completion of testing

PERFORMANCE STANDARDS:

Schedule: Technical:

On-time delivery of the above ATR's acceptance of the above

FINAL DELIVERY DESTINATION (NAME, BLDG, ROOM):

Gopal Rao, building 20, room 166